# Sebacic acid, decyl 2-methoxyethyl ester

**Inchi:** InChI=1S/C23H44O5/c1-3-4-5-6-7-10-13-16-19-27-22(24)17-14-11-8-9-12-15-18-23(25)2
**InchiKey:** QGDIEHYSTQVOLG-UHFFFAOYSA-N
**Formula:** C23H44O5
**SMILES:** CCCCCCCCCCOC(=O)CCCCCCCCC(=O)OCCOC
**Mol. weight [g/mol]:** 400.59

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -430.06 | kJ/mol | Joback Method |
| hf | -1139.87 | kJ/mol | Joback Method |
| hfus | 62.09 | kJ/mol | Joback Method |
| hvap | 87.51 | kJ/mol | Joback Method |
| log10ws | -6.26 | | Crippen Method |
| logp | 5.981 | | Crippen Method |
| mcvol | 355.680 | ml/mol | McGowan Method |
| pc | 890.54 | kPa | Joback Method |
| rinpol | 2799.00 | | NIST Webbook |
| rinpol | 2799.00 | | NIST Webbook |
| tb | 900.64 | K | Joback Method |
| tc | 1103.95 | K | Joback Method |
| tf | 515.52 | K | Joback Method |
| vc | 1.389 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 1186.66 | J/mol×K | 900.64 | Joback Method |
| cpg | 1269.34 | J/mol×K | 1070.07 | Joback Method |
| cpg | 1255.63 | J/mol×K | 1036.18 | Joback Method |
| cpg | 1240.53 | J/mol×K | 1002.30 | Joback Method |
| cpg | 1224.02 | J/mol×K | 968.41 | Joback Method |
| cpg | 1206.06 | J/mol×K | 934.53 | Joback Method |
| cpg | 1281.67 | J/mol×K | 1103.95 | Joback Method |
| dvisc | 0.0000253 | Pa×s | 900.64 | Joback Method |

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|---|---|---|---|---|
| dvisc | 0.0000337 | Pa×s | 836.45 | Joback Method |
| dvisc | 0.0000469 | Pa×s | 772.27 | Joback Method |
| dvisc | 0.0000693 | Pa×s | 708.08 | Joback Method |
| dvisc | 0.0001109 | Pa×s | 643.89 | Joback Method |
| dvisc | 0.0001968 | Pa×s | 579.71 | Joback Method |
| dvisc | 0.0004027 | Pa×s | 515.52 | Joback Method |

# Sources

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|---|---|
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=U355762&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

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|---|---|
| **cpg:** | Ideal gas heat capacity |
| **dvisc:** | Dynamic viscosity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **rinpol:** | Non-polar retention indices |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |